

Making Physics: A Biography of Brookhaven National Laboratory, 1946-1972. By Robert P. Crease. University of Chicago Press, Chicago. (1999). 434 pages. \$38.00, GBP 30.50.

Contents:

List of illustrations. Acknowledgments. Introduction. 1. A team of young General Groveses. 2. A reluctant director, a remote site. 3. National laboratory. 4. The "Brookhaven Concept". 5. The Pile Project. 6. Community relations. 7. The Accelerator Project. 8. Reactor research in the 1950s. 9. "For the enlightenment and benefit of mankind": Research at the Cosmotron. 10. Goldhaber's directorship. 11. Research at the Alternating Gradient Synchrotron. 12. The High Flux Beam Reactor. 13. Crossroad. Appendix. Some key personnel of Brookhaven National Laboratory and Associated Universities, Inc.

A Course in Mathematical Modeling. By Douglas D. Mooney and Randall J. Swift. Mathematical Association of America, Washington, DC. (1999). 431 pages. \$41.95.

Contents:

Acknowledgements. Preface. To the teacher. 0. Modeling: Basics: Purpose, resolution, and resources. 1. Discrete dynamical systems. 2. Discrete stochasticity. 3. Stages, states, and classes. 4. Empirical modeling. 5. Continuous models. 6. Continuous stochasticity. Appendices. A. Chi-square table. B. F-table. C. t-table. D. *Mathematica* appendix. References. Index.

ASP in a Nutshell: A Desktop Quick Reference. By A. Keyton Weissinger. O'Reilly, Sebastopol, CA. (1999). 407 pages. \$24.95.

Contents:

Preface. I. Introduction to active server pages. 1. Active server pages: An introduction. 2. Active server pages: Server-side scripting. 3. Extending active server pages. II. Object reference. 4. Application object. 5. Object-Context object. 6. Request object. 7. Response object. 8. Server object. 9. Session object. 10. Preprocessing directives, server-side includes, and GLOBAL.ASA. III. Installable component reference. 11. ActiveX data objects 1.5. 12. Ad rotator component. 13. Browser capabilities component. 14. Collaboration data objects for Windows NT server. 15. Content linking component. 16. Content rotator component. 17. Counters component. 18. File access component. 19. MyInfo component. 20. Page counter component. 21. Permission checker component. IV. Appendices. A. Converting CGI/WinCGI applications into ASP applications. B. ASP on alternative platforms. C. Configuration of ASP application on IIS. Index.

Independent Component Analysis. By Te-Won Lee. Kluwer Academic Publishers, Boston, MA. (1998). 210 pages. \$118.00, NLG 270.00, GBP 80.25.

Contents:

Abstract. Preface. Acknowledgments. List of figures. List of tables. Abbreviations and symbols. Introduction. I. Independent component analysis: Theory. 1. Basics. 2. Independent component analysis. 3. A unifying information-theoretic framework for ICA. 4. Blind separation of time-delayed and convolved sources. 5. ICA using overcomplete representations. 6. First steps towards nonlinear ICA. II. Independent component analysis: Applications. 7. Biomedical applications of ICA. 8. ICA for feature extraction. 9. Unsupervised classification with ICA mixture models. 10. Conclusions and future research. Bibliography. About the author. Index.

Fuzzy Control of Industrial Systems: Theory and Applications. By Ian S. Shaw. Kluwer Academic Publishers, Boston, MA. (1998). 192 pages. \$115.00, NLG 260.00, GBP 78.20.

Contents:

Note to instructors. Figures. Tables. Preface. 1. What is an intelligent system? 2. Modeling plants and processes of control systems. 3. Introduction to set theory and fuzzy logic. 4. Set operations. 5. Generic structure of fuzzy controllers. 6. Fuzzy controllers. 7. System identification for rule-based systems. 8. Stability analysis of fuzzy control system. 9. Neurofuzzy controllers. 10. Practical fuzzy controller development. 11. Examples of fuzzy control. 12. Fuzzy model of human control operator. 13. Collaborative intelligent control systems. 14. Conclusions. Index.